



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/578,528	05/08/2006	Yuichi Ozeki	062492	9482
38834	7590	02/05/2009	EXAMINER	
WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP			MALEKZADEH, SEYED MASOUD	
1250 CONNECTICUT AVENUE, NW			ART UNIT	PAPER NUMBER
SUITE 700			1791	
WASHINGTON, DC 20036				
MAIL DATE                    DELIVERY MODE				
02/05/2009                    PAPER				

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/578,528	<b>Applicant(s)</b> OZEKI ET AL.
	<b>Examiner</b> SEYED M. MALEKZADEH	<b>Art Unit</b> 1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 20 October 2008.
- 2a) This action is FINAL.      2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 12-20,22 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 12-20,22 and 23 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/1449B)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date \_\_\_\_\_
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

Claims 12-20 and 22-23 are pending.

Claims 1-11 and 21 are cancelled.

Claim 23 is newly added.

Claim 12 is amended.

In view of the amendment, filed on 10/20/2008, following rejections are **withdrawn** from the previous office action for the reason of record.

- Rejection of claims 1-5 and 12-14 under non-statutory double patenting
- Rejection of claims 1-22 under 35 U.S.C. 112, second paragraph
- Rejection of claims 1-22 under 35 U.S.C. 102(b) as being anticipated by Kondo et al. (WO 01/98067)

**New Grounds of Rejection**

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> paragraph***

The following is a quotation of the second paragraph of 35 U.S.C.

112:

Art Unit: 1791

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 23 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 23 recites “the molding material for the outer layer supplied in the outer layer supply step **prior to the core supply step** is performed **prior to the core supply step**” (see lines 1-2) in which renders the claim indefinite and unclear because it is not clear how is it possible that a core supply step performs prior to itself? Appropriate correction is required.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.

Art Unit: 1791

2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 12 - 20 and 22-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kondo et al (WO 01/98067) in view of Yamashita et al (US 5,100,604).

Note: Kondo et al. (US Publication 2004/0113319) is a continuation of Kondo et al. (WO 01/98067). Therefore, for the purpose of the patent examination Kondo et al. (US' 319) has been used as a translation for Kondo et al. (WO 01/98067)

**As to claim 12,** Kondo et al (WO '067) teach a method of manufacturing a molding article with a core and an outer layer using a compression molding apparatus comprising an upper punch with a double structure including a center punch (4A) and an outer periphery of the center punch (4B), a lower punch () with a double structure including a center punch (5A) and an outer punch (5B), and a die (3) wherein both of the upper punch (4A and 4B) and the lower punch (5A and 5B) are arranged in the vertical direction of the die (3), respectively, and the outer punches (4B and 5B) surround the outer periphery of the center punches (4A and 5A) and being slid able and capable of a compressing operation. (See claims 1 and 2 and figures 1-5)

Furthermore, Kondo et al (WO '067) teach the method comprises the step of supplying molding material for the core (NP) and molding

Art Unit: 1791

material for outer layer (OP1 and OP2), respectively, and further, the step of compression molding of the molding material for the core and the molding material for the outer layer, and finally, a compression-molding step of the whole molding with core. (See claim 4). Moreover, the prior art teaches the step of supplying and filling the molding material for the outer layer (OP1 and OP2) is performed when a tip (7A) of the lower center punch (5A) takes a position protruding from a tip (7B) of the lower outer punch (5B) (See figure 3B) and also the step of compression-molding the whole molding article with a core is performed with the tips of the lower center punch (5A) and the lower outer punch (5B) aligned with each other. (See figures 3G - 3H)

Moreover, Kondo et al (WO '067) teaches the core material is supplied into a space defined above the lower center punch (5A) which is surrounded by the lower outer punch (5B) and also a compression molding step of the molding material for the core supplied in the preceding step to mold a core (See figures 1G -1H) and further, an outer layer supply (OP2) step of supplying molding material for the outer layer into a space defined above and around the molding in the die molded in the preceding step until a tip of the lower center punch finally takes a position protruding from a tip of the lower outer punch; and moreover, a whole molding step of compression-molding the core molding and the molding material for the outer layer with tips of the lower outer punch

Art Unit: 1791

and the lower center punch aligned with each other. (See figures 3J - 3M).

**However,** the prior art fails to teach the step of lowering the tip of the lower outer punch in compare to the tip of the lower center punch for supplying the outer layer molding material, as claimed in claim 12.

**In the analogous art,** Yamashita et al. (US '604) teach a method of making a resin bonded magnet of flaky pieces comprising the steps of providing composite granules obtained from a mixture of magnetically isotropic and fine pieces and compression molding the granules to obtain a green compact and subsequently thermally treated to allow reaction between the one film forming polymer by dissociation of the blocking groups by heating, thereby obtaining a resin-bonded magnet. (See abstract)

Yamashita et al. (US '604) further teach the process is implemented by a molding apparatus comprising a hopper (1), a die (2) in which the die (2) comprises a lower punch (3), a center core (4), an upper punch (5), and a cavity (7) as a molding cavity defined between the die (2) and the center core (4) and defined by the lower punch (3) with an open end (9), (see column 10 and lines 13-31) wherein the step of supplying the molding material (6) into the compression molding system is implemented when a tip of the lower center punch (4) takes a position of protruding from a tip of the lower outer punch (3) by lowering the lower

Art Unit: 1791

outer punch (3) in compare to the lower center punch (4). (See figures 1a-1d)

Therefore, **it would have been obvious** for one of ordinary skill in the art at the time of applicant's invention to modify the teachings of Kondo et al. (WO 01/98067) through implementing a step of lowering the lower outer punch's tip in compare to the lower center punch's tip in the outer layer molding material supplying step in order to improve the quality of the molding product through providing a very high dimensional accuracy and a uniform distribution of the density throughout the obtained product, as suggested by Yamashita et al. (US '604).

Further, **as to claim 14**, Kondo et al (WO '067) teach the step of supplying the molding material for the outer layer (OP1 or OP2) is not performed prior to the step of supplying the molding material for the core (NP). (See figure 4B, 4K, and 4P)

**As to claim 13**, Kondo et al (WO '067) teach the step of supplying the molding material consists of two steps including the step of supplying the molding material for the core (NP) and the step of supplying the molding material for the outer layer (OP1 and OP2) wherein the step of supplying the molding material for the outer layer (OP1) is performed prior to the step of supplying the molding material for the core (NP) in such a way that the molding material for the outer layer is supplied to the die, first; then, the molding material for the core (NP) is

Art Unit: 1791

supplied, and finally, the molding material for the outer layer (OP2) is supplied into the die (3). (See figures 3B, 3E, and 3H)

Kondo et al (WO '067) also teach in the step (3b) which is the outer layer material (OP1) is supplied into the die (5), the lower center punch (5A) is protruded from the lower outer punch (5B), and then in step (3c), the tip (7A) of the lower center punch and the tip (7B) of the lower outer punch are aligned and further, the lower outer punch (5B) and the lower center punch (5A) are raised, see step (3d), before the step (3e) of supplying the molding material for the core (NP).

Therefore, **as to claim 15**, Kondo et al ('067) teach the lower outer punch (5B) is raised to align the tip (7B) of the lower outer punch with the tip (7A) of the lower center punch from the position in which the tip (7A) of the lower center punch is protruded from the tip (7B) of the lower outer punch after the step of supplying the molding material for the outer layer (OP1) and posterior to the step of supplying the molding material for the core (NP). (See figures 3A-3D)

Kondo et al (WO '067) also teach in the step (3b) which is the outer layer material (OP1) is supplied into the die (5), the lower center punch (5A) is protruded from the lower outer punch (5B), and then in step (3c), the lower center punch (5A) is lowered and the tip (7A) of the lower center punch and the tip (7B) of the lower outer punch are aligned, and further, the lower outer punch (5B) and the lower center punch (5A) are raised,

Art Unit: 1791

see step (3d), before the step (3e) of supplying the molding material for the core (NP).

Therefore, **as to claim 16**, Kondo et al ('067) teach the lower center punch (5A) is lowered to align the tip of the lower center punch (7A) with the tip of the lower outer punch (7B) from the position in which the tip of the lower center punch (7A) is protruded from the tip of the lower outer punch (7B) after the step of supplying the molding material for the outer layer (OP1) posterior to the step of supplying the molding material for the core (NP). (See figures 3A - 3D)

Also, **as to claim 17**, Kondo et al ('067) disclose the lower center punch (5A) is lowered while the lower outer punch (5B) is raised to align the tip (7B) of the lower outer punch with the tip (7A) of the lower center punch from the position in which the tip (7A) of the lower center punch is protruded from the tip (7B) of the lower outer punch after the step of supplying the molding material for the outer layer posterior to the step of supplying the molding material for the core.

Moreover, **as to claims 18, 21, and 22**, Kondo et al ('067) teach the operation of aligning the tips of the lower outer punch and the lower center punch with each other is performed with the upper center punch (7A) and upper outer punch (7B) pressing the molding material in the die (3) after the step of supplying the molding material for the outer layer posterior to the step of supplying the molding material for the core. (See figure 3C)

Art Unit: 1791

Furthermore, **as to claim 19**, Kondo et al ('067) teach the process of pressing the molding material in the die (3) by the upper center punch (4A) and the upper outer punch (4B) is preformed with the tip (7A) of the lower center punch in the position protruding from the tip (7B) of the lower outer punch after the step of supplying the molding material for the outer layer (OP1) posterior to the step of supplying the material for the core (NP). (See figure 3B)

Moreover, **as to claim 20**, Kondo et al ('067) discloses the process of pressing the molding material in the die (3) by the upper center punch (4A) and the upper outer punch (4B) is not performed until the tip of the lower center punch (5A) and the tip of the lower outer punch (5B) become aligned with each other after the step of supplying the molding material for the outer layer (OP1) posterior to the step of supplying the molding material for the core (NP). (See figure 3C)

Further, **as to claim 23**, Kondo et al ('067) teach that the outer layer molding step of compression-molding the molding material of the outer layer supplied in the outer layer supply step prior to the core supply step is performed.

#### ***Response to Arguments***

**Applicant's arguments** with respect to claims 12-20 and 22-23 have been considered but **are moot** in view of the new ground(s) of rejection.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seyed Masoud Malekzadeh whose telephone number is 571-272-6215. The examiner can normally be reached on Monday – Friday at 8:30 am – 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven P. Griffin, can be reached on (571)

Art Unit: 1791

272-1189. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published application may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SEYED M. MALEKZADEH/

Patent Examiner

Art Unit 1791

/Steven P. Griffin/

Supervisory Patent Examiner, Art Unit 1791